TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for Rulemaking Adoption

AGENDA REQUESTED: October 23, 2013

DATE OF REQUEST: October 4, 2013

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Charlotte Horn, (512) 239-0779

CAPTION: Docket No. 2013-0711-RUL. Consideration for adoption of amended Section 336.1115 of 30 TAC Chapter 336, Radioactive Substance Rules.

The adoption would amend requirements for the release for unrestricted use of outdoor areas at source material recovery sites or by-product disposal sites. The adopted rulemaking would also remove existing language in Section 336.1115(e) to eliminate the uranium soil concentration standard, leaving a radium soil concentration limit coupled with the radium benchmark dose approach method for the release of outdoor areas. The proposed rule was published in the July 5, 2013 issue of the *Texas Register* (38 TexReg 4300). (Tony Gonzalez, Don Redmond) (Rule Project No. 2013-029-336-WS)

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Copy to CCC Secretary? NO X YES

Texas Commission on Environmental Quality
Interoffice Memorandum

To: Commissioners **Date:** October 4, 2013

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Docket No.: 2013-0711-RUL

Subject: Commission Approval for Rulemaking Adoption
Chapter 336, Radioactive Substance Rules
Uranium Soil Concentration Standard
Rule Project No. 2013-029-336-WS

Background and reason(s) for the rulemaking:

This rulemaking revises the decommissioning standards for source material recovery sites (uranium mining sites) or radioactive by-product disposal sites to be consistent with the requirements of the United States Nuclear Regulatory Commission. Section 336.1115(e) establishes the requirements for the release for unrestricted use of outdoor areas at source material recovery sites or by-product disposal sites. On February 12, 2013, Barrett & Associates, PLLC submitted a rulemaking petition on behalf of Uranium Energy Corp (UEC), Radioactive Materials License Number R06064. In their petition, UEC requested that the commission amend §336.1115(e) related to the standards (other than radium) for release of outdoor areas for unrestricted use to reflect that Radium Benchmark Dose approach is an alternative method to meeting the soil criteria specified in §336.1115(e). After considering the petition at the TCEQ's agenda on April 10, 2013, the commission approved the initiation of a rulemaking based on this petition.

The licensing program for uranium mining has transferred several times from the TCEQ and the Texas Department of State Health Services (DSHS). When the program was previously at TCEQ, the commission proposed rules and invited comments on including a standard for the concentration of uranium in soils in a 1997 rulemaking (Rule Log Number 1997-154-336-WS). In response to comments from the Nuclear Regulatory Commission (NRC), however, the commission did not adopt a standard for uranium (*See* May 27, 1997, issue of the *Texas Register* (22 TexReg 4593)). After the program was transferred to DSHS in 1997, it appears the standard for uranium was picked up as a requirement in DSHS rules without any specific explanation. The current TCEQ rule language was carried back over from the rules of DSHS when the licensing program was transferred by Senate Bill 1604 in 2007 (Rule Project Number 2007-060-336-PR). The dose-based approach was added in the rule in response to a comment from the NRC, but the limit for the uranium concentration in soil was not removed from the rule.

In review of the petition, the uranium concentration in soil standard retained in the rule was found to be redundant to and ultimately in conflict with the Radium Benchmark Dose

approach. The adopted rule corrects the conflict and redundancy in the rule by inserting the appropriate equivalent federal standards.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The rulemaking amends §336.1115(e) by deleting the existing language in paragraph (3) that established a limit for the concentration of natural uranium in soil. The rulemaking will reword the requirement of the radium benchmark approach to be consistent with the NRC's applicable language in 10 Code of Federal Regulations (CFR) Part 40, Appendix A, Criterion 6(6). As required under the existing rule, the potential peak annual total effective dose equivalent for members of the public or member of the critical group will be calculated by the methodology provided in NUREG-1620, Appendix H-"Guidance to the U.S. Nuclear Regulatory Commission Staff on Radium Dose Approach."

B.) Scope required by federal regulations or state statutes:

None.

C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Statutory authority:

The amendments are adopted under the Texas Radiation Control Act, Chapter 401 of the Texas Health and Safety Code (THSC); THSC, §401.011,which provides the commission authority to regulate and license the disposal of radioactive substances, the commercial processing and storage of radioactive substances, and the recovery and processing of source material; THSC, §401.051, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; THSC, §401.103, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; THSC, §401.104, which requires the commission to provide rules for licensing for the disposal of radioactive substances; THSC, §401.262, which authorizes the commission to assure that by-product disposal sites are closed and that by-product material is managed and disposed in compliance with applicable federal standards; and THSC, §401.412, which provides the commission authority to adopt rules for the recovery and processing of source material and the disposal of by-product material. The amendments are also authorized by Texas Water Code §5.103, which provides the commission with the authority to adopt rules necessary to carry out its powers and duties under the water code and other laws of the state.

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The amendments implement THSC, Chapter 401, relating to Radioactive Materials and Other Sources of Radiation, including §401.011, relating to Radiation Control Agency; §401.051, relating to Adoption of Rules and Guidelines; §401.103, relating to Rules and Guidelines for Licensing and Registration; §401.104, relating to Licensing and Registration Rules; §401.262, relating to Management of Certain By-Product Material.

Effect on the:

A.) Regulated community:

The rulemaking was initiated in response to a petition filed on behalf of Uranium Energy Corp, a uranium mining and processing company and is consistent with their request that the rule reflect current equivalent federal standards. The adopted rule clears up conflicting language in the current rule regarding uranium concentration in soil and amends the standards for release of sites to unrestricted use to equivalent federal standards. For sites to be released for unrestricted use would be determined by the Radium Benchmark Dose approach which would apply a relative uranium concentration in soil limit based on the radium concentration in soil. The uranium mining industry in Texas will now be under the same clean-up criteria as sites regulated by the NRC.

Fiscal impacts of the adopted rule on the regulated community would be negligible.

B.) Public:

The rulemaking would result in the continued protection of the environment and public health and safety by evaluating risk through a dose based approach which aligns with NRC site release standards. Compared to the current rule, the adopted rulemaking effectively reduces the allowable effective dose equivalent to the general public at sites released for unrestricted use.

The adopted rule would not have significant fiscal impact on individuals.

C.) Agency programs:

No changes to agency programs as a result of the rulemaking.

Stakeholder meetings:

There were no stakeholder meetings held associated with this rulemaking.

Public comment:

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The public comment period closed on August 5, 2013. The commission received two comments in response to the rulemaking. The first comment was received from the Uranium Committee of the Texas Mining & Reclamation Association (TMRA-UC). The TMRA-UC comment is in support of the adopted rule. The second comment was submitted by the NRC. The NRC's comment letter did not address the proposed revision to the decommissioning standards in §336.1115(e). The NRC's comment addressed a provision in the TCEQ rule in §336.1127 for determining the amount of financial assurance required for long-term care and maintenance obligations based on an assumed real annual interest rate. Because the commission's proposed rulemaking did not address financial assurance requirements or propose revisions to §336.1127, the NRC comment is not germane to the pending rulemaking and cannot be addressed at this time.

Significant changes from proposal:

No changes to the proposed rulemaking were made.

Potential controversial concerns and legislative interest:

No concerns or legislative interest have been raised in response to the rulemaking.

Does this rulemaking affect any current policies or require development of new policies?

No current policies will be affected and the development of new policies will not be required.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

The current standard in §336.1115(e) specifies a uranium concentration in soil limit of 30 picocuries per gram (pCi/g) up to six inches below the surface. It also specifies a reference to using the Radium Benchmark Dose approach with an allowable total effective dose equivalent of 100 millirem/year (Rem is the special unit of absorbed dose expressed as a dose equivalent). This dose equivalent, when applied, has the potential to give a conflicting allowable uranium concentration in soil limit of 1500 pCi/g.

The adopted rule removes the conflict of specifying an absolute uranium soil limit by deriving a uranium soil limit dependent on the Radium Benchmark dose approach calculation. The Radium Benchmark dose approach results in a dose that is limited by the concentration of radium (and other radionuclides) in the soil and the physical and chemical characteristics of the site being examined.

If the rulemaking does not go forward there would remain the conflict allowing for uranium concentration in soil limit in excess of the NRC prescribed Radium Benchmark

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Dose approach, which potentially puts Texas in violation of the requirements for agreement state regulation of by-product material as per 10 CFR §150.31(2) "Compliance with standards which shall be adopted by the Agreement State for the protection of the public health, safety, and the environment from hazards associated with such material which are equivalent, to the extent practicable, or more stringent than, standards in appendix A of 10 CFR part 40 of this chapter adopted and enforced by the Commission for the same purposes, including requirements and standards subsequently promulgated by the Commission and the Administrator of the Environmental Protection Agency pursuant to the Uranium Mill Tailing Radiation Control Act of 1978."

Key points in the adoption rulemaking schedule:

***Texas Register* proposal publication date**: July 5, 2013
Anticipated Texas Register adoption publication date: November 8, 2013
Anticipated effective date: November 13, 2013
Six-month *Texas Register* filing deadline: January 5, 2014

Agency contacts:

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The Texas Commission on Environmental Quality (TCEQ, agency, commission) adopts the amendment to §336.1115.

Section 336.1115 is adopted *without change* to the proposed text as published in the July 5, 2013 issue of the *Texas Register* (38 TexReg 4300) and as corrected in the July 19, 2013 issue of the *Texas Register* (38 TexReg 4653) and will not be republished.

Background and Summary of the Factual Basis for the Adopted Rule

In response to a petition for rulemaking, the commission adopts this rulemaking to amend the decommissioning standards applicable to radioactive source material (i.e., uranium mining) sites and by-product disposal sites so that the standards will conform to federal requirements.

On February 12, 2013, Barrett & Associates, PLLC submitted a rulemaking petition on behalf of Uranium Energy Corp. (UEC), Radioactive Materials License Number R06064. In their petition, UEC requested that the commission amend §336.1115(e) related to the standards (other than radium) for release of outdoor areas for unrestricted use to reflect that the Radium Benchmark Dose approach is an alternative method to meeting the soil criteria specified in §336.1115(e). At the TCEQ's agenda on April 10, 2013, the commission approved the initiation of a rulemaking based on this petition (Project Number 2013-021-PET-NR).

As requested in the petition, the commission adopts the amendment to §336.1115(e) to remove paragraph (3) and amend paragraph (4) to reflect the Radium Benchmark Dose approach as the clean-up standard (in addition to the radium standard) for release of outdoor areas for unrestricted use. In considering the petition, agency staff reviewed the current language in §336.1115(e) and determined that inclusion of a specific soil standard for the concentration of uranium in soil is not consistent with the federal requirements of the United States Nuclear Regulatory Commission (NRC). The federal regulations set a standard for the concentration of radium in soil and require a risk-based dose assessment, but do not establish a specific concentration limit for uranium. A decommissioning standard for the concentration of uranium in soil is not necessary because the required risk-based radium benchmark dose assessment approach accounts for the radioactivity of the radionuclides in soil, including uranium.

The licensing program for uranium mining has transferred several times from the TCEQ and the Texas Department of State Health Services (DSHS). When the program was previously at TCEQ, the commission proposed rules and invited comments on including a standard for the concentration of uranium in soils in a 1997 rulemaking (Rule Log Number 1997-154-336-WS). In response to comments from the NRC, however, the commission did not adopt a standard for uranium (*See* May 27, 1997, issue of the *Texas Register* (22 TexReg 4593)). After the program was transferred to DSHS in 1997, it

appears the standard for uranium was picked up as a requirement in DSHS rules without any specific explanation. The current TCEQ rule language was carried back over from the rules of DSHS when the licensing program was transferred by Senate Bill 1604 in 2007 (Rule Project Number 2007-060-336-PR). The dose-based approach was added in the rule in response to a comment from the NRC, but the limit for the uranium concentration was not removed from the rule. Accordingly, the commission now adopts the rule to remove the uranium concentration requirement to be consistent with the applicable federal requirements.

A correction of error was published in the July 19, 2013 issue of the *Texas Register* (38 TexReg 4653) to correct four typographical errors in the proposed rule where the superscript "2" appeared as a subscript.

Section Discussion

The commission adopts administrative changes throughout the adopted rule to reflect the agency's existing practices, conform with *Texas Register* and agency guidelines, and correct typographical and grammatical errors.

Section 336.1115(e) establishes the requirements for the release for unrestricted use of outdoor areas at source material recovery sites or by-product disposal sites. The commission adopts the amendment to §336.1115(e) by deleting the existing language in

paragraph (3) that established a limit for the concentration of natural uranium in soil. The commission adopts the amendment to delete the language in paragraph (4) and renumber the existing requirement for the radium benchmark dose approach as paragraph (3). The commission adopts the amendment to reword the requirement of the radium benchmark approach to be consistent with the NRC's applicable language in 10 Code of Federal Regulations (CFR) Part 40, Appendix A, Criterion 6(6). As required under the existing rule, the potential peak annual total effective dose equivalent for members of the public or member of the critical group must be calculated by the methodology provided in NUREG-1620, Appendix H-"Guidance to the U.S. Nuclear Regulatory Commission Staff on Radium Dose Approach."

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in the act. "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted amendment to Chapter 336 is not anticipated

to adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state because the adopted rule establishes decommissioning standards for the release of outdoor areas at uranium mining sites or by-product disposal sites that are compatible with the requirements of the NRC. The commission proposes the rule to remove the standard for the concentration of uranium in soil. A decommissioning standard for the concentration of uranium in soil is not necessary because the required risk-based radium benchmark dose assessment approach accounts for the radioactivity of uranium.

Furthermore, the adopted rule does not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The adopted rule does not exceed a standard set by federal law, an express requirement of state law, a requirement of a delegation agreement, nor adopt a rule solely under the general powers of the agency.

The Texas Radiation Control Act, Texas Health and Safety Code (THSC), Chapter 401, authorizes the commission to regulate the recovery and processing of source material and the disposal of radioactive by-product material. THSC, §401.262 authorizes the commission to assure that processing and disposal sites are closed and that by-product material is managed in compliance with applicable federal standards. In addition, the state of Texas is an "Agreement State," authorized by the NRC to administer a radiation control program under the Atomic Energy Act. The adopted rule does not exceed a standard set by federal law. The adopted rule implements standards that are consistent with the NRC requirements for the decommissioning of source material recovery sites or by-product disposal sites under 10 CFR Part 40, Appendix A, Criterion 6(6).

The adopted rule does not exceed an express requirement of state law. The Texas Radiation Control Act, THSC, Chapter 401, establishes general requirements for the licensing and disposal of radioactive materials. THSC, §401.262 specifically authorizes the commission to assure that processing and disposal sites are closed in compliance with applicable federal standards that are protective of human health and safety and the environment.

The commission has also determined that the adopted rule does not exceed a requirement of a delegation agreement or contract between the state and an agency of

the federal government. The State of Texas has been designated as an "Agreement State" by the NRC under the authority of the Atomic Energy Act. The Atomic Energy Act requires that the NRC find that the state radiation control program is compatible with the NRC's requirements for the regulation of radioactive materials and is adequate to protect health and safety. The commission determined that the adopted rule does not exceed the NRC's requirements nor exceed the requirements for retaining status as an "Agreement State."

The commission also determined that the rule is proposed under specific authority of the Texas Radiation Control Act, THSC, Chapter 401. THSC, §§401.051, 401.103, 401.104, and 401.412 authorize the commission to adopt rules for the control of sources of radiation, the licensing of source material recovery and disposal of radioactive materials.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received regarding the regulatory impact analysis determination.

Takings Impact Assessment

The commission evaluated the adopted rule and performed a preliminary assessment of whether the adopted rule constitutes a taking under Texas Government Code, Chapter

2007. The commission's preliminary assessment indicates that Texas Government Code, Chapter 2007 does not apply to the proposed rule because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code, §2007.003(b)(4). The State of Texas has received authorization as an "Agreement State" from the NRC to administer a radiation control program under the Atomic Energy Act. The Atomic Energy Act requires the NRC to find that the state's program is compatible with NRC requirements for the regulation of radioactive materials and is protective of health and safety. The adopted rule will provide consistency with federal regulations.

Nevertheless, the commission further evaluated the adopted rule and made a preliminary assessment that implementation of the proposed rule would not constitute a taking of real property under Texas Government Code, Chapter 2007. The purpose of the adopted rule is to establish the standards for release of outdoor areas for unrestricted use after the completion of decommissioning activities at uranium mining or by-product disposal sites. The standards are adopted to be consistent with the NRC's standards provided in 10 CFR Part 40, Appendix A, Criterion 6(6). The adopted rule would substantially advance this purpose by amending the current rule to remove a specific standard for concentration of uranium in soil, which is not included in the federal standards for release of property for unrestricted use. No requirements are imposed by the commission in the adopted rule that would constitute a taking of real

property.

Promulgation and enforcement of the adopted rule would be neither a statutory nor a constitutional taking of private real property. The adopted rule does not affect a landowner's rights in private real property because this rulemaking does not burden (constitutionally), nor restrict or limit, the owner's right to property and reduce its value by 25% or more beyond which would otherwise exist in the absence of the rule. The adopted rule removes the standard for the concentration of uranium in soil and mirror language of the NRC for the release of outdoor areas after decommissioning.

Consistency with the Coastal Management Program

The commission reviewed the adopted rule and found that it is neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will it affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the adopted rule is not subject to the Texas Coastal Management Program.

The commission invited public comment regarding the consistency with the coastal management program during the public comment period. No comments were received on the Coastal Management Program.

Public Comment

The comment period closed on August 5, 2013. The commission received two comments. One comment was received from the Uranium Committee of the Texas Mining & Reclamation Association (TMRA-UC). The TMRA-UC comment was in support of the adopted rule change. The second comment was received by the NRC. The NRC's comment letter did not address the proposed revision to §336.1115. The NRC's comment addressed an existing provision in the TCEQ rule in §336.1127 for determining the amount of financial assurance required for long-term care and maintenance obligations based on an assumed real annual interest rate of 2%.

Response to Comments

TMRA-UC is in support of the adopted rule and believes it would "adequately address the inconsistencies between the existing language of Section 336.1115(e) and 10 CFR Part 40 Appendix A, Criterion 6(6)." The commission appreciates the statement of support for this rulemaking.

The NRC's comment was unrelated to the proposed rulemaking. Because the commission's proposed rulemaking did not address financial assurance requirements or propose revisions to §336.1127, the NRC comment is not germane to this rulemaking and cannot be addressed by the commission at this time. No change to the proposed rule was made in response to this comment.

SUBCHAPTER L: LICENSING OF SOURCE MATERIAL RECOVERY AND BY-PRODUCT MATERIAL DISPOSAL FACILITIES
§336.1115

Statutory Authority

The amendment is adopted under the Texas Radiation Control Act, Texas Health and Safety Code (THSC), Chapter 401; THSC, §401.011,which provides the commission authority to regulate and license the disposal of radioactive substances, the commercial processing and storage of radioactive substances, and the recovery and processing of source material; THSC, §401.051, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; THSC, §401.103, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; THSC, §401.104, which requires the commission to provide rules for licensing for the disposal of radioactive substances; THSC, §401.262, which authorizes the commission to assure that by-product disposal sites are closed and that by-product material is managed and disposed in compliance with applicable federal standards; and THSC, §401.412, which provides the commission authority to adopt rules for the recovery and processing of source material and the disposal of by-product material. The adopted amendment is also authorized by Texas Water Code, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state.

The amendment implement THSC, Chapter 401, relating to Radioactive Materials and Other Sources of Radiation, including THSC, §401.011, relating to Radiation Control Agency; THSC, §401.051, relating to Adoption of Rules and Guidelines; THSC, §401.103, relating to Rules and Guidelines for Licensing and Registration; THSC, §401.104, relating to Licensing and Registration Rules; and THSC, §401.262, relating to Management of Certain By-Product Material.

§336.1115. Expiration and Termination of Licenses; Decommissioning of Sites, Separate Buildings or Outdoor Areas.

(a) The term of the specific license is for a fixed term not to exceed ten years.

(b) Expiration of the specific license does not relieve the licensee of the requirements of this chapter.

(c) All license provisions continue in effect beyond the expiration date with respect to possession of radioactive material until the agency notifies the former licensee in writing that the provisions of the license are no longer binding. During this time, the former licensee must:

(1) be limited to actions involving radioactive material that are related to decommissioning; and

(2) continue to control entry to restricted areas until the location(s) is suitable for release for unrestricted use in accordance with the requirements of subsection (e) of this section.

(d) Within 60 days of the occurrence of any of the following, each licensee must provide notification to the agency in writing and either begin decommissioning its site, or any separate buildings or outdoor areas that contain residual radioactivity in accordance with the closure plan in §336.1111(1)(B) of this title (relating to Special Requirements for a License Application for Source Material Recovery and By-product [By-Product] Material Disposal Facilities), so that the buildings or outdoor areas are suitable for release in accordance with subsection (e) of this section if:

(1) the license has expired in accordance with subsection (a) of this section; or

(2) the licensee has decided to permanently cease principal activities, as defined in §336.1105(24) of this title (relating to Definitions), at the entire site or in any separate building or outdoor area; or

(3) no principal activities have been conducted for a period of 24 months in any building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with agency requirements.

(e) Outdoor areas are considered suitable for release for unrestricted use if the following limits are not exceeded.

(1) The concentration of radium-226 or radium-228 (in the case of thorium by-product material) in soil, averaged over any 100 square meters (m^2), may not exceed the background level by more than:

(A) 5 picocuries per gram (pCi/g) (0.185 becquerel per gram (Bq/g)), averaged over the first 15 centimeters (cm) [cm] of soil below the surface; and

(B) 15 pCi/g (0.555 Bq/g), averaged over 15 cm thick layers of soil more than 15 cm below the surface.

(2) The contamination of vegetation may not exceed 5 pCi/g (0.185 Bq/g), based on dry weight, for radium-226 or radium-228.

[(3) The concentration of natural uranium in soil, with no daughters present, averaged over any 100 m^2, may not exceed the background level by more than:]

[(A) 30 pCi/g (1.11 Bq/g), averaged over the top 15 cm of soil below the surface; and]

[(B) 150 pCi/g (5.55 Bq/g), average concentration at depths greater than 15 centimeters below the surface; and]

[(4)no individual member of the public will receive an effective dose equivalent in excess of 100 mrem (1 mSv) per year as calculated by the methodology provided in NUREG-1620, Appendix H - "Guidance to the U.S. Nuclear Regulatory Commission Staff on the Radium Dose Approach."]

(3) By-product material containing concentrations of radionuclides other than radium in soil (e.g., natural uranium, natural thorium, lead-210), and surface activity on remaining structures, must not result in a total effective dose equivalent (TEDE) exceeding the dose from cleanup of radium contaminated soil to the standard in paragraph (1) of this subsection (radium benchmark dose), and must be at levels which are as low as reasonably achievable. If more than one residual radionuclide is present in the same 100 m^2 area, the sum of the ratios for each radionuclide of concentration present to the calculated radium benchmark dose equivalent concentration limits will not exceed "1" (unity). A calculation of the potential peak annual TEDE within 1,000 years to the average member of the critical group that would result from applying the radium standard (not including radon) must be submitted for approval, using the United States Nuclear Regulatory Commission (NRC) staff guidance on the Radium Benchmark Dose Approach.

(f) Coincident with the notification required by subsection (c) of this section, the licensee shall maintain in effect all decommissioning financial security established by the licensee in accordance with §336.1125 of this title (relating to Financial Assurance [Security] Requirements) in conjunction with a license issuance or renewal or as required by this section. The amount of the financial security must be increased, or may be decreased, as appropriate, with agency approval, to cover the detailed cost estimate for decommissioning established in accordance with subsection (l)(5) of this section.

(g) In addition to the provisions of subsection (h) of this section, each licensee must submit an updated closure plan to the agency within 12 months of the notification required by subsection (d) of this section. The updated closure plan must meet the requirements of §336.1111(1)(B) and §336.1125 of this title. The updated closure plan must describe the actual conditions of the facilities and site and the proposed closure activities and procedures.

(h) The agency may grant a request to delay or postpone initiation of the decommissioning process if the agency determines that such relief is not detrimental to the occupational and public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification in accordance with subsection (d) of this section. The schedule for decommissioning in subsection (d) of this section may not begin until the agency has made a determination on the request.

(i) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the agency and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(1) procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(2) workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(3) procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(4) procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(j) The agency may approve an alternate schedule for submittal of a decommissioning plan required in accordance with subsection (d) of this section if the agency determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the occupational and public health and safety and is otherwise in the public interest.

(k) The procedures listed in subsection (i) of this section may not be carried out prior to approval of the decommissioning plan.

(l) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(1) a description of the conditions of the site, separate buildings, or outdoor area sufficient to evaluate the acceptability of the plan;

(2) a description of planned decommissioning activities;

(3) a description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(4) a description of the planned final radiation survey;

(5) an updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate decommissioning; and

(6) for decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in subsection (p) of this section.

(m) The proposed decommissioning plan may be approved by the agency if the information in the plan demonstrates that the decommissioning will be completed as soon as practicable and that the occupational health and safety of workers and the public will be adequately protected.

(n) Except as provided subsection (p) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(o) Except as provided in subsection (p) of this section, when decommissioning involves the entire site, the licensee must request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(p) The agency may approve a request for an alternate schedule for completion of decommissioning of the site or separate buildings or outdoor areas and the license termination if appropriate, if the agency determines that the alternative is warranted by the consideration of the following:

(1) whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period; and

(3) other site-specific factors that the agency may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, groundwater treatment activities, monitored natural groundwater restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(q) As the final step in decommissioning, the licensee must:

(1) certify the disposition of all radioactive material, including accumulated by-product material;

(2) conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in accordance with subsection (e) of this section. The licensee shall, as appropriate:

(A) report the following levels:

(i) gamma radiation in units of microroentgen per hour (μR/hr) (millisieverts per hour (mSv/hr)) at 1 meter (m) from surfaces;

(ii) radioactivity, including alpha and beta, in units of disintegrations per minute (dpm) or microcuries (μCi) (megabecquerels (MBq)) per 100 [square centimeters (]cm^2[)] for surfaces;

(iii) μCi (MBq) per milliliter for water; and

(iv) picocuries (pCi) (becquerels (Bq)) per gram (g) for solids such as soils or concrete; and

(B) specify the manufacturer's name, and model and serial number of survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(r) The executive director will provide written notification to specific licensees, including former licensees with license provisions continued in effect beyond the expiration date in accordance with subsection (d) of this section, that the provisions of the license are no longer binding. The executive director will provide such notification when the executive director determines that:

(1) radioactive material has been properly disposed;

(2) reasonable effort has been made to eliminate residual radioactive contamination, if present;

(3) a radiation survey has been performed that demonstrates that the premises are suitable for release in accordance with agency requirements;

(4) other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with the requirements of subsection (e) of this section;

(5) all records required by §336.343 of this title (relating to Records of Surveys) have been submitted to the agency;

(6) the licensee has paid any outstanding fees required by this chapter and has resolved any outstanding notice(s) of violation issued to the licensee;

(7) the licensee has met the applicable technical and other requirements for closure and reclamation of a by-product material disposal site; and

(8) the [United States Nuclear Regulatory Commission (]NRC[)] has made a determination that all applicable standards and requirements have been met.

(s) Licenses for source material recovery or by-product material disposal are exempt from subsections (d)(3), (g), and (h) of this section with respect to reclamation

of by-product material impoundments or disposal areas. Timely reclamation plans for by-product material disposal areas must be submitted and approved in accordance with §336.1129(p) - (aa) of this title (relating to Technical Requirements).

(t) A licensee may request that a subsite or a portion of a licensed site be released for unrestricted use before full license termination as long as release of the area of concern will not adversely impact the remaining unaffected areas and will not be recontaminated by ongoing authorized activities. When the licensee is confident that the area of concern will be acceptable to the agency for release for unrestricted use, a written request for release for unrestricted use and agency confirmation of closeout work performed shall be submitted to the agency. The request should include a comprehensive report, accompanied by survey and sample results that show contamination is less than the limits specified in subsection (e) of this section and an explanation of how ongoing authorized activities will not adversely affect the area proposed to be released. Upon confirmation by the agency that the area of concern is releasable for unrestricted use, the licensee may apply for a license amendment, if required.

ORDER ADOPTING AMENDED RULES

Docket No. 2013 - 0711 - RUL

On October 23, 2013, the Texas Commission on Environmental Quality (Commission) adopted an amended rule in 30 TAC Chapter 336, concerning Radioactive Substance Rules. The proposed rule was published for comment in the July 5, 2013, issue of the *Texas Register* (38 TexReg 4300) and a correction of error was published in the July 19, 2013 issue of the *Texas Register* (38 TexReg 4653).

IT IS THEREFORE ORDERED BY THE COMMISSION that the amended rules are hereby adopted. The Commission further authorizes staff to make any non-substantive revisions to the rule necessary to comply with *Texas Register* requirements. The adopted rule and the preamble to the adopted rule is incorporated by reference in this Order as if set forth at length verbatim in this Order.

This Order constitutes the Order of the Commission required by the Administrative Procedure Act, Government Code, § 2001.033.

If any portion of this Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

Date Issued:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

_____

Bryan W. Shaw, Ph.D., Chairman

Filed with the Office of the Secretary of State on June 24, 2013.

TRD-201302676
Dirk Johnson
General Counsel
Texas Department of Insurance, Division of Workers' Compensation
Earliest possible date of adoption: August 4, 2013
For further information, please call: (512) 804-4703

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SUBCHAPTER D. FACILITIES AND PROPERTY MANAGEMENT

28 TAC §103.400

(Editor's note: The text of the following section proposed for repeal will not be published. The section may be examined in the offices of the Texas Department of Insurance, Division of Workers' Compensation or in the Texas Register office, James Earl Rudder Building, 1019 Brazos Street, Austin, Texas.)

The repeal is proposed under the broad general authority granted to the Commissioner of Workers' Compensation by Labor Code §§402.00111, 402.00113, and 402.061. Section 402.00111 provides that the Commissioner of Workers' Compensation shall exercise all executive authority, including rulemaking authority under the Labor Code. Section 402.00113 provides that the Division is administratively attached to the Department. Section 402.061 provides that the Commissioner of Workers' Compensation shall adopt rules as necessary for the implementation and enforcement of the Labor Code.

The following statute is affected by this proposal: Labor Code §§402.00113, 402.041 and 402.042.

§103.400. Fleet Vehicle Management Program.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on June 24, 2013.

TRD-201302677
Dirk Johnson
General Counsel
Texas Department of Insurance, Division of Workers' Compensation
Earliest possible date of adoption: August 4, 2013
For further information, please call: (512) 804-4703

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TITLE 30. ENVIRONMENTAL QUALITY

PART 1. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 336. RADIOACTIVE SUBSTANCE RULES

SUBCHAPTER L. LICENSING OF SOURCE MATERIAL RECOVERY AND BY-PRODUCT MATERIAL DISPOSAL FACILITIES

30 TAC §336.1115

The Texas Commission on Environmental Quality (TCEQ, agency, commission) proposes to amend §336.1115.

Background and Summary of the Factual Basis for the Proposed Rule

In response to a petition for rulemaking, the commission proposes this rulemaking to amend the decommissioning standards applicable to radioactive source material (i.e., uranium mining) sites and by-product disposal sites so that the standards will conform to federal requirements.

On February 12, 2013, Barrett & Associates, PLLC submitted a rulemaking petition on behalf of Uranium Energy Corp. (UEC), Radioactive Materials License Number R06064. In their petition, UEC requested that the commission amend §336.1115(e) related to the standards (other than radium) for release of outdoor areas for unrestricted use to reflect that the Radium Benchmark Dose approach is an alternative method to meeting the soil criteria specified in §336.1115(e). At the TCEQ's agenda on April 10, 2013, the commission approved the initiation of a rulemaking based on this petition (Project Number 2013-021-PET-NR).

As requested in the petition, the commission proposes to amend §336.1115(e) to remove paragraph (3) and amend paragraph (4) to reflect the Radium Benchmark Dose approach as the clean-up standard (in addition to the radium standard) for release of outdoor areas for unrestricted use. In considering the petition, agency staff reviewed the current language in §336.1115(e) and determined that inclusion of a specific soil standard for the concentration of uranium in soil is not consistent with the federal requirements of the United States Nuclear Regulatory Commission (NRC). The federal regulations set a standard for the concentration of radium in soil and require a risk-based dose assessment, but do not establish a specific concentration limit for uranium. A decommissioning standard for the concentration of uranium in soil is not necessary because the required risk-based radium benchmark dose assessment approach accounts for the radioactivity of the radionuclides in soil, including uranium.

The licensing program for uranium mining has transferred several times from the TCEQ and the Texas Department of State Health Services (DSHS). When the program was previously at TCEQ, the commission proposed rules and invited comments on including a standard for the concentration of uranium in soils in a 1997 rulemaking (Rule Log Number 1997-154-336-WS). In response to comments from the NRC, however, the commission did not adopt a standard for uranium *(See* May 27, 1997, issue of the *Texas Register* (22 TexReg 4593).) After the program was transferred to DSHS in 1997, it appears the standard for uranium was picked up as a requirement in DSHS rules without any specific explanation. The current TCEQ rule language was carried back over from the rules of DSHS when the licensing program was transferred by Senate Bill 1604 in 2007 (Rule Project Number 2007-060-336-PR). The dose-based approach was added in the rule in response to a comment from the NRC, but the limit for the uranium concentration was not removed from the rule. Accordingly, the commission now proposes the rule to remove the uranium concentration requirement to be consistent with the applicable federal requirements.

Section Discussion

The commission proposes administrative changes throughout the proposed rule to reflect the agency's existing practices, conform with *Texas Register* and agency guidelines, and correct typographical and grammatical errors.

Section 336.1115(e) establishes the requirements for the release for unrestricted use of outdoor areas at source material recovery sites or by-product disposal sites. The commission proposes to amend §336.1115(e) by deleting the existing language in paragraph (3) that established a limit for the concentration of natural uranium in soil. The commission proposes to delete the language in paragraph (4) and renumber the existing requirement for the radium benchmark dose approach as paragraph (3). The commission proposes to reword the requirement of the radium benchmark approach to be consistent with the NRC's applicable language in 10 Code of Federal Regulations (CFR) Part 40, Appendix A, Criterion 6(6). As required under the existing rule, the potential peak annual total effective dose equivalent for members of the public or member of the critical group must be calculated by the methodology provided in NUREG-1620, Appendix H - "Guidance to the U.S. Nuclear Regulatory Commission Staff on Radium Dose Approach."

Fiscal Note: Costs to State and Local Government

Nina Chamness, Analyst, Strategic Planning and Assessment, has determined that, for the first five-year period the proposed rule is in effect, no significant fiscal implications are anticipated for the agency. Other units of state or local government would not experience any fiscal impact as a result of the administration or enforcement of the proposed rule. The proposed rule affects business entities that are licensed to receive, possess, use, or dispose of radioactive material in source material recovery facilities and other operations that accept radioactive by-product material for disposal.

Specifically, the rule would amend Texas' existing decommissioning standards that apply to radioactive source material sites and by-product disposal sites so that they conform to federal requirements of the NRC. The proposed rule removes a state specific standard for the concentration of uranium in soil and amends state rules to establish a risk based Radium Benchmark Dose Approach for determining the acceptable concentration of radionuclides (including uranium) in soil that the public could be exposed to from a decommissioned site.

The proposed rule would not have a significant fiscal impact on the agency. Units of local government are not expected to experience fiscal impacts since they do not typically decommission sites with radionuclides.

Public Benefits and Costs

Ms. Chamness also determined that for each year of the first five years the proposed rule is in effect, the public benefit anticipated from the changes seen in the proposed rule will be conformance to NRC decommissioning standards that are protective of human health and safety and the environment.

The proposed rule would not have a significant fiscal impact on individuals.

There are ten businesses that own or operate 17 facilities that could be affected by the proposed rule. These facilities are located in Brooks, Duval, Kleberg, Live Oak, Karnes, and Andrews Counties. Four have been closed and are awaiting release for unrestricted use; nine are pre-operational or operational in-situ uranium recovery and processing facilities; three are by-product material impoundments closed to new radioactive waste; and one is an operational by-product material disposal facility. The proposed rule would only apply when a facility is in the decommissioning stage which occurs after operations have ceased. The proposed rule would not change the amount of sampling required, and sampling costs are expected to remain unchanged from that required by current rules. The proposed rule could generate cost savings or cost increases for waste disposal charges depending on the amount and characteristics of the different radionuclides found in the soil that must be removed using the NRC risk based Radium Benchmark Dose Approach. However, the removal of a state specific standard for uranium that conflicts with the federal decommissioning standards is expected to reduce costs for most businesses that remediate sites that have uranium contamination.

The proposed rule is in response to a petition to make the state's decommissioning standards conform to federal requirements. The UEC has finished decommissioning a facility where uranium is present and is awaiting agency confirmation that the site meets release limits that comply with federal risk based standards. By removing the existing state standard for uranium, UEC would not be required to remove additional soil and pay for additional transportation and waste disposal to meet the separate uranium standard. Estimated savings might be as much as $9,000 per truckload of waste.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rule, since a small business would not be required to remediate sites for a separate state standard for uranium that contradicts federal standards. Small businesses could expect to see the same types of cost decreases for waste disposal of uranium or by-product material as that of a large business. There may be as many as three small businesses that are licensed to decommission sites with radioactive material.

Small Business Regulatory Flexibility Analysis

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rule does not adversely affect a small or micro-business in a material way for the first five years that the proposed rule is in effect.

Local Employment Impact Statement

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in the act. "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The proposed amendment to Chapter 336 is not anticipated to adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state because the proposed rule establishes decommissioning standards for the release of outdoor areas at uranium mining sites or by-product disposal

sites that are compatible with the requirements of the NRC. The commission proposes the rule to remove the standard for the concentration of uranium in soil. A decommissioning standard for the concentration of uranium in soil is not necessary because the required risk-based radium benchmark dose assessment approach accounts for the radioactivity of uranium.

Furthermore, the proposed rulemaking does not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The proposed rulemaking does not exceed a standard set by federal law, an express requirement of state law, a requirement of a delegation agreement, nor adopt a rule solely under the general powers of the agency.

The Texas Radiation Control Act, Texas Health and Safety Code (THSC), Chapter 401, authorizes the commission to regulate the recovery and processing of source material and the disposal of radioactive by-product material. THSC, §401.262 authorizes the commission to assure that processing and disposal sites are closed and that by-product material is managed in compliance with applicable federal standards. In addition, the state of Texas is an "Agreement State," authorized by the NRC to administer a radiation control program under the Atomic Energy Act. The proposed rule does not exceed a standard set by federal law. The proposed rulemaking implements standards that are consistent with the NRC requirements for the decommissioning of source material recovery sites or by-product disposal sites under 10 CFR Part 40, Appendix A, Criterion 6(6).

The proposed rule does not exceed an express requirement of state law. The Texas Radiation Control Act, THSC, Chapter 401, establishes general requirements for the licensing and disposal of radioactive materials. THSC, §401.262 specifically authorizes the commission to assure that processing and disposal sites are closed in compliance with applicable federal standards that are protective of human health and safety and the environment.

The commission has also determined that the proposed rule does not exceed a requirement of a delegation agreement or contract between the state and an agency of the federal government. The State of Texas has been designated as an "Agreement State" by the NRC under the authority of the Atomic Energy Act. The Atomic Energy Act requires that the NRC find that the state radiation control program is compatible with the NRC's requirements for the regulation of radioactive materials and is adequate to protect health and safety. The commission determined that the proposed rule does not exceed the NRC's requirements nor exceed the requirements for retaining status as an "Agreement State."

The commission also determined that the rule is proposed under specific authority of the Texas Radiation Control Act, THSC, Chapter 401. THSC, §§401.051, 401.103, 401.104, and 401.412 authorize the commission to adopt rules for the control of sources of radiation, the licensing of source material recovery, and disposal of radioactive materials.

The commission invites public comment of the draft regulatory impact analysis determination.

Written comments on the draft regulatory impact analysis determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission evaluated the proposed rule and performed a preliminary assessment of whether the proposed rule constitutes a taking under Texas Government Code, Chapter 2007. The commission's preliminary assessment indicates that Texas Government Code, Chapter 2007 does not apply to the proposed rule because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code, §2007.003(b)(4). The State of Texas has received authorization as an "Agreement State" from the NRC to administer a radiation control program under the Atomic Energy Act. The Atomic Energy Act requires the NRC to find that the state's program is compatible with NRC requirements for the regulation of radioactive materials and is protective of health and safety. The proposed rulemaking will provide consistency with federal regulations.

Nevertheless, the commission further evaluated the proposed rule and made a preliminary assessment that implementation of the proposed rule would not constitute a taking of real property under Texas Government Code, Chapter 2007. The purpose of the proposed rule is to establish the standards for release of outdoor areas for unrestricted use after the completion of decommissioning activities at uranium mining or by-product disposal sites. The standards are proposed to be consistent with the NRC's standards provided in 10 CFR Part 40, Appendix A, Criterion 6(6). The proposed rule would substantially advance this purpose by amending the current rule to remove a specific standard for concentration of uranium in soil, which is not included in the federal standards for release of property for unrestricted use. No requirements are imposed by the commission in the proposed rule that would constitute a taking of real property.

Promulgation and enforcement of the proposed rule would be neither a statutory nor a constitutional taking of private real property. The proposed rule does not affect a landowner's rights in private real property because this rulemaking does not burden (constitutionally), nor restrict or limit, the owner's right to property and reduce its value by 25% or more beyond which would otherwise exist in the absence of the rule. The proposed rule removes the standard for the concentration of uranium in soil and mirror language of the NRC for the release of outdoor areas after decommissioning.

Consistency with the Coastal Management Program

The commission reviewed the proposed rule and found that it is neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will it affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the proposed rule is not subject to the Texas Coastal Management Program.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Submittal of Comments

Written comments may be submitted to Charlotte Horn, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. Electronic comments may be submitted at: *http://www5.tceq.texas.gov/rules/ecomments/*. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2013-029-336-OW. The comment period closes August 5, 2013. Copies of the proposed rulemaking can be obtained from the commission's Web site at *http://www.tceq.texas.gov/nav/rules/propose_adopt.html*. For further information, please contact Tony Gonzalez, (512) 239-6471.

Statutory Authority

The amendment is proposed under the Texas Radiation Control Act, Texas Health and Safety Code (THSC), Chapter 401; THSC, §401.011,which provides the commission authority to regulate and license the disposal of radioactive substances, the commercial processing and storage of radioactive substances, and the recovery and processing of source material; THSC, §401.051, which authorizes the commission to adopt rules and guidelines relating to control of sources of radiation; THSC, §401.103, which authorizes the commission to adopt rules and guidelines that provide for licensing and registration for the control of sources of radiation; THSC, §401.104, which requires the commission to provide rules for licensing for the disposal of radioactive substances; THSC, §401.262, which authorizes the commission to assure that by-product disposal sites are closed and that by-product material is managed and disposed in compliance with applicable federal standards; and THSC, §401.412, which provides the commission authority to adopt rules for the recovery and processing of source material and the disposal of by-product material. The proposed amendment is also authorized by Texas Water Code, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its powers and duties under the Texas Water Code and other laws of the state.

The amendment implements THSC, Chapter 401, relating to Radioactive Materials and Other Sources of Radiation, including THSC, §401.011, relating to Radiation Control Agency; THSC, §401.051, relating to Adoption of Rules and Guidelines; THSC, §401.103, relating to Rules and Guidelines for Licensing and Registration; THSC, §401.104, relating to Licensing and Registration Rules; and THSC, §401.262, relating to Management of Certain By-Product Material.

§336.1115. Expiration and Termination of Licenses; Decommissioning of Sites, Separate Buildings or Outdoor Areas.

(a) The term of the specific license is for a fixed term not to exceed ten years.

(b) Expiration of the specific license does not relieve the licensee of the requirements of this chapter.

(c) All license provisions continue in effect beyond the expiration date with respect to possession of radioactive material until the agency notifies the former licensee in writing that the provisions of the license are no longer binding. During this time, the former licensee must:

(1) be limited to actions involving radioactive material that are related to decommissioning; and

(2) continue to control entry to restricted areas until the location(s) is suitable for release for unrestricted use in accordance with the requirements of subsection (e) of this section.

(d) Within 60 days of the occurrence of any of the following, each licensee must provide notification to the agency in writing and either begin decommissioning its site, or any separate buildings or outdoor areas that contain residual radioactivity in accordance with the closure plan in §336.1111(1)(B) of this title (relating to Special Requirements for a License Application for Source Material Recovery and By-product [~~By-Product~~] Material Disposal Facilities), so that the buildings or outdoor areas are suitable for release in accordance with subsection (e) of this section if:

(1) the license has expired in accordance with subsection (a) of this section; or

(2) the licensee has decided to permanently cease principal activities, as defined in §336.1105(24) of this title (relating to Definitions), at the entire site or in any separate building or outdoor area; or

(3) no principal activities have been conducted for a period of 24 months in any building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with agency requirements.

(e) Outdoor areas are considered suitable for release for unrestricted use if the following limits are not exceeded.

(1) The concentration of radium-226 or radium-228 (in the case of thorium by-product material) in soil, averaged over any 100 square meters (m_2), may not exceed the background level by more than:

(A) 5 picocuries per gram (pCi/g) (0.185 becquerel per gram (Bq/g)), averaged over the first 15 centimeters (cm) [~~cm~~] of soil below the surface; and

(B) 15 pCi/g (0.555 Bq/g), averaged over 15 cm thick layers of soil more than 15 cm below the surface.

(2) The contamination of vegetation may not exceed 5 pCi/g (0.185 Bq/g), based on dry weight, for radium-226 or radium-228.

(3) By-product material containing concentrations of radionuclides other than radium in soil (e.g., natural uranium, natural thorium, lead-210), and surface activity on remaining structures, must not result in a total effective dose equivalent (TEDE) exceeding the dose from cleanup of radium contaminated soil to the standard in paragraph (1) of this subsection (radium benchmark dose), and must be at levels which are as low as reasonably achievable. If more than one residual radionuclide is present in the same 100 m_2 area, the sum of the ratios for each radionuclide of concentration present to the calculated radium benchmark dose equivalent concentration limits will not exceed "1" (unity). A calculation of the potential peak annual TEDE within 1,000 years to the average member of the critical group that would result from applying the radium standard (not including radon) must be submitted for approval, using the United States Nuclear Regulatory Commission (NRC) staff guidance on the Radium Benchmark Dose Approach.

[~~(3) The concentration of natural uranium in soil, with no daughters present, averaged over any 100 m_2, may not exceed the background level by more than:~~]

[~~(A) 30 pCi/g (1.11 Bq/g), averaged over the top 15 cm of soil below the surface; and~~]

[~~(B) 150 pCi/g (5.55 Bq/g), average concentration at depths greater than 15 centimeters below the surface; and~~]

[(4) no individual member of the public will receive an effective dose equivalent in excess of 100 mrem (1 mSv) per year as calculated by the methodology provided in NUREG-1620, Appendix H - "Guidance to the U.S. Nuclear Regulatory Commission Staff on the Radium Dose Approach."]

(f) Coincident with the notification required by subsection (c) of this section, the licensee shall maintain in effect all decommissioning financial security established by the licensee in accordance with §336.1125 of this title (relating to Financial Assurance [Security] Requirements) in conjunction with a license issuance or renewal or as required by this section. The amount of the financial security must be increased, or may be decreased, as appropriate, with agency approval, to cover the detailed cost estimate for decommissioning established in accordance with subsection (l)(5) of this section.

(g) In addition to the provisions of subsection (h) of this section, each licensee must submit an updated closure plan to the agency within 12 months of the notification required by subsection (d) of this section. The updated closure plan must meet the requirements of §336.1111(1)(B) and §336.1125 of this title. The updated closure plan must describe the actual conditions of the facilities and site and the proposed closure activities and procedures.

(h) The agency may grant a request to delay or postpone initiation of the decommissioning process if the agency determines that such relief is not detrimental to the occupational and public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification in accordance with subsection (d) of this section. The schedule for decommissioning in subsection (d) of this section may not begin until the agency has made a determination on the request.

(i) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the agency and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(1) procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(2) workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(3) procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(4) procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(j) The agency may approve an alternate schedule for submittal of a decommissioning plan required in accordance with subsection (d) of this section if the agency determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the occupational and public health and safety and is otherwise in the public interest.

(k) The procedures listed in subsection (i) of this section may not be carried out prior to approval of the decommissioning plan.

(l) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(1) a description of the conditions of the site, separate buildings, or outdoor area sufficient to evaluate the acceptability of the plan;

(2) a description of planned decommissioning activities;

(3) a description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(4) a description of the planned final radiation survey;

(5) an updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate decommissioning; and

(6) for decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in subsection (p) of this section.

(m) The proposed decommissioning plan may be approved by the agency if the information in the plan demonstrates that the decommissioning will be completed as soon as practicable and that the occupational health and safety of workers and the public will be adequately protected.

(n) Except as provided subsection (p) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(o) Except as provided in subsection (p) of this section, when decommissioning involves the entire site, the licensee must request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(p) The agency may approve a request for an alternate schedule for completion of decommissioning of the site or separate buildings or outdoor areas and the license termination if appropriate, if the agency determines that the alternative is warranted by the consideration of the following:

(1) whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period; and

(3) other site-specific factors that the agency may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, groundwater treatment activities, monitored natural groundwater restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(q) As the final step in decommissioning, the licensee must:

(1) certify the disposition of all radioactive material, including accumulated by-product material;

(2) conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in accordance with subsection (e) of this section. The licensee shall, as appropriate:

(A) report the following levels:

(i) gamma radiation in units of microroentgen per hour (μR/hr) (millisieverts per hour (mSv/hr)) at 1 meter (m) from surfaces;

(ii) radioactivity, including alpha and beta, in units of disintegrations per minute (dpm) or microcuries (μCi) (megabecquerels (MBq)) per 100 [~~square centimeters~~ (]cm_2[)] for surfaces;

(iii) μCi (MBq) per milliliter for water; and

(iv) picocuries (pCi) (becquerels (Bq)) per gram (g) for solids such as soils or concrete; and

(B) specify the manufacturer's name, and model and serial number of survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(r) The executive director will provide written notification to specific licensees, including former licensees with license provisions continued in effect beyond the expiration date in accordance with subsection (d) of this section, that the provisions of the license are no longer binding. The executive director will provide such notification when the executive director determines that:

(1) radioactive material has been properly disposed;

(2) reasonable effort has been made to eliminate residual radioactive contamination, if present;

(3) a radiation survey has been performed that demonstrates that the premises are suitable for release in accordance with agency requirements;

(4) other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with the requirements of subsection (e) of this section;

(5) all records required by §336.343 of this title (relating to Records of Surveys) have been submitted to the agency;

(6) the licensee has paid any outstanding fees required by this chapter and has resolved any outstanding notice(s) of violation issued to the licensee;

(7) the licensee has met the applicable technical and other requirements for closure and reclamation of a by-product material disposal site; and

(8) the [~~United States Nuclear Regulatory Commission~~ (]NRC[)] has made a determination that all applicable standards and requirements have been met.

(s) Licenses for source material recovery or by-product material disposal are exempt from subsections (d)(3), (g), and (h) of this section with respect to reclamation of by-product material impoundments or disposal areas. Timely reclamation plans for by-product material disposal areas must be submitted and approved in accordance with §336.1129(p) - (aa) of this title (relating to Technical Requirements).

(t) A licensee may request that a subsite or a portion of a licensed site be released for unrestricted use before full license termination as long as release of the area of concern will not adversely impact the remaining unaffected areas and will not be recontaminated by ongoing authorized activities. When the licensee is confident that the area of concern will be acceptable to the agency for release for unrestricted use, a written request for release for unrestricted use and agency confirmation of closeout work performed shall be submitted to the agency. The request should include a comprehensive report, accompanied by survey and sample results that show contamination is less than the limits specified in subsection (e) of this section and an explanation of how ongoing authorized activities will not adversely affect the area proposed to be released. Upon confirmation by the agency that the area of concern is releasable for unrestricted use, the licensee may apply for a license amendment, if required.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on June 21, 2013.

TRD-201302598
Robert Martinez
Director, Environmental Law Division
Texas Commission on Environmental Quality
Earliest possible date of adoption: August 4, 2013
For further information, please call: (512) 239-0779

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TITLE 34. PUBLIC FINANCE

PART 3. TEACHER RETIREMENT SYSTEM OF TEXAS

CHAPTER 47. QUALIFIED DOMESTIC RELATIONS ORDERS

34 TAC §47.17

The Teacher Retirement System of Texas (TRS) proposes amendments to §47.17, concerning qualified domestic relations orders, in Chapter 47 of TRS' rules. Chapter 47 addresses court orders that divide TRS benefit payments, usually in connection with a divorce, and direct payment of part or all of a benefit to an "alternate payee." A qualified domestic relations order (QDRO) is a court order that has been reviewed by TRS and found to meet applicable requirements to allow TRS to make direct payment to an alternate payee of the portion of the TRS benefit awarded to the alternate payee, if, as and when the TRS benefit is payable to the TRS participant.

Section 47.17 addresses how alternate payee benefits are calculated if payment to the alternate payee commences before the commencement of a member's benefits due to an election by the alternate payee under §804.005, Texas Government Code. Section 804.005 authorizes TRS to pay the alternate payee the court awarded portion of the actuarial equivalent of the benefits accrued to the member at the time of the alternate payee's election. This amount is in lieu of the benefits awarded in the QDRO. In order for the alternate payee to commence receiving the benefits awarded in the QDRO before the member begins to receive a distribution of benefits, the member must be at least 62 years of age and not retired but eligible to retire without reduction for early age. The benefit to the alternate payee is payable in the form of a life annuity.

Because of the many types of awards made to alternate payees in QDROs over the years, it became necessary to provide instructions in the rule addressing how to calculate the alternate payee's portion under each type of award. Subsection (y) addresses how to calculate the alternate payee's portion when the QDRO directs TRS to pay a stated monthly amount. The subsection currently directs staff to simply divide the stated monthly amount by the member's life annuity factor, a calculation method which will result in a reduced benefit to the alternate payee. The subsection should direct staff to multiply the stated monthly amount by the member's life annuity factor in order to arrive at the amount of money TRS would have expected to pay to the alternate payee over the member's lifetime and then to divide the lump sum amount by the alternate payee's life annuity factor

Greimel, (512) 239-5690; REGIONAL OFFICE: 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

TRD-201302819
Kathleen C. Decker
Director, Litigation Division
Texas Commission on Environmental Quality
Filed: July 9, 2013

♦ ♦ ♦

Correction of Error

The Texas Commission on Environmental Quality (TCEQ) proposed an amendment to 30 TAC §336.1115 in the July 5, 2013, issue of the *Texas Register* (38 TexReg 4300). In four errors in the rule text, the superscript "2" appeared as a subscript.

On page 4303, §336.1115(e)(1), "m_2" should be "m^2". The corrected text reads as follows:

"(1) The concentration of radium-226 or radium-228 (in the case of thorium by-product material) in soil, averaged over any 100 square meters (m^2), may not exceed the background level by more than:"

Also on page 4303, §336.1115(e)(3), "100 m_2 area" should be "100 m^2 area". The corrected text reads as follows:

"(3) ...If more than one residual radionuclide is present in the same 100 m^2 area, the sum of the ratios for each radionuclide of concentration present to the calculated radium benchmark dose equivalent concentration limits will not exceed "1" (unity)...."

Also on page 4303, in subsection (e)(3) that is bracketed for deletion, "100 m_2" should be "100m^2".

On page 4305, in §336.1115(q)(2)(A)(ii), "cm_2" should be "cm^2". The corrected text should read as follows:

"(ii) radioactivity, including alpha and beta, in units of disintegrations per minute (dpm) or microcuries (μCi) (megabecquerels (MBq)) per 100 [~~square centimeters (~~]cm^2[~~)~~] for surfaces;"

TRD-201302850

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Notice of Opportunity to Comment on Agreed Orders of Administrative Enforcement Actions

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) staff is providing an opportunity for written public comment on the listed Agreed Orders (AOs) in accordance with Texas Water Code (TWC), §7.075. TWC, §7.075 requires that before the commission may approve the AOs, the commission shall allow the public an opportunity to submit written comments on the proposed AOs. TWC, §7.075 requires that notice of the opportunity to comment must be published in the *Texas Register* no later than the 30th day before the date on which the public comment period closes, which in this case is **August 19, 2013.** TWC, §7.075 also requires that the commission promptly consider any written comments received and that the commission may withdraw or withhold approval of an AO if a comment discloses facts or considerations that indicate that consent is inappropriate, improper, inadequate, or inconsistent with the requirements of the statutes and rules within the commission's jurisdiction or the commission's orders and permits issued in accordance with the commission's regulatory authority. Additional notice of changes to a proposed AO is not required to be published if those changes are made in response to written comments.

A copy of each proposed AO is available for public inspection at both the commission's central office, located at 12100 Park 35 Circle, Building A, 3rd Floor, Austin, Texas 78753, (512) 239-3400 and at the applicable regional office listed as follows. Written comments about an AO should be sent to the attorney designated for the AO at the commission's central office at P.O. Box 13087, MC 175, Austin, Texas 78711-3087 and must be **received by 5:00 p.m. on August 19, 2013.** Comments may also be sent by facsimile machine to the attorney at (512) 239-3434. The designated attorney is available to discuss the AO and/or the comment procedure at the listed phone number; however, TWC, §7.075 provides that comments on an AO shall be submitted to the commission in **writing.**

(1) COMPANY: Absolutely Outdoors, Ltd. and TERRA TEXAS LAND COMPANY, LLC d/b/a Seber Lane Recycling Center; DOCKET NUMBER: 2013-0246-MSW-E; TCEQ ID NUMBER: RN105659361; LOCATION: 8813 Seber Drive, Tomball, Harris County; TYPE OF FACILITY: wood mulching facility; RULES VIOLATED: 30 TAC §330.15(c), by failing to prevent the unauthorized disposal of municipal solid waste; PENALTY: $9,375; STAFF ATTORNEY: Phillip M. Goodwin, Litigation Division, MC 175, (512) 239-0675; REGIONAL OFFICE: Houston Regional Office, 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(2) COMPANY: SABRINA REALTY, INC.; DOCKET NUMBER: 2012-2724-PST-E; TCEQ ID NUMBER: RN102223138; LOCATION: 3635 Aldine Mail Road, Houston, Harris County; TYPE OF FACILITY: underground storage tank (UST) system and convenience store with retail sales of gasoline; RULES VIOLATED: TWC, §26.3475(c)(1) and 30 TAC §334.50(b)(1)(A), by failing to monitor the USTs for releases at a frequency of at least once every month (not to exceed 35 days between each monitoring); PENALTY: $4,875; STAFF ATTORNEY: Rebecca M. Combs, Litigation Division, MC 175, (512) 239-6939; REGIONAL OFFICE: Houston Regional Office, 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(3) COMPANY: Sam's Truck Stop Business, Inc.; DOCKET NUMBER: 2012-2082-MLM-E; TCEQ ID NUMBER: RN101377620; LOCATION: Interstate Highway 10 West, 20 miles east of Van Horn, Culberson County; TYPE OF FACILITY: public water system (PWS); RULES VIOLATED: 30 TAC §285.34(e) and TCEQ AO Docket Number 2009-0252-MLM-E, Ordering Provision Numbers 2.b.v. and 2.h., by failing to provide a holding tank constructed according to the requirements established for septic tanks under 30 TAC §285.32(b)(1)(D) and (E); 30 TAC §285.37(b)(2)(B)(i), by failing to ensure that back flush from a point-of-entry reverse osmosis system does not cause hydraulic overloading prior to discharge into an On-Site Sewage Facility; 30 TAC §290.41(c)(3)(K), by failing to properly seal the wellhead with a gasket or sealing compound; 30 TAC §290.41(c)(3)(O), by failing to enclose the well at the PWS facility with an intruder-resistant fence with a lockable gate or a locked and ventilated well house; and 30 TAC §290.42(e)(2), by failing to ensure that all groundwater is disinfected prior to distribution; PENALTY: $36,234; STAFF ATTORNEY: Steven M. Fishburn, Litigation Division, MC 175, (512) 239-0635; REGIONAL OFFICE: El Paso Regional Office, 401 East Franklin Avenue, Suite 560, El Paso, Texas 79901-1212, (915) 834-4949.

(4) COMPANY: Superior Crude Gathering, Inc.; DOCKET NUMBER: 2012-0945-AIR-E; TCEQ ID NUMBER: RN102510088; LOCATION: 1472 Farm-to-Market Road 2725, Ingleside, San Patricio County; TYPE OF FACILITY: bulk crude storage and transportation terminal; RULES VIOLATED: Texas Health and Safety Code, §382.085(b) and 30 TAC §116.110(a)(4) and §106.261(a)(2), and Permit-by-Rule Registration Number 80119, by failing to prevent unauthorized emissions; PENALTY: $215,600; Supplemental Envi-

BARRETT
& ASSOCIATES, PLLC

3006 Bee Caves Road, Suite D-310, Austin, TX 78746
Phone: 512.600.3800 Fax: 512.600.3899
February 11, 2013

Mr. Zak Covar
Executive Director
Texas Commission on Environmental Quality
PO Box 13087
Austin, Texas 78711-3087

Re: Petition for Rulemaking pursuant to Section 401.051, *Health and Safety Code*

Dear Mr. Covar:

This rulemaking petition is submitted on behalf of Uranium Energy Corp. (UEC), 500 North Shoreline, Suite 800N, Corpus Christi, Texas 78401 pursuant to, *inter alia,* Section 401.051 *Health and Safety Code*. UEC requests that the Texas Commission on Environmental Quality (TCEQ) amend 30 TAC Section 336.1115(e) related to standards for release of outdoor areas for unrestricted use to reflect that the Radium Benchmark Dose approach is an alternative method to meeting the soil criteria in 336.1115(e).

BACKGROUND (30 TAC Section 20.15(a)(3)(A)

SB 1604, 80th Legislature, transferred jurisdiction for this program to the TCEQ. On January 30, 2008, the TCEQ adopted, among other rules, 30 TAC 336.1115(e). In adopting this rule, the TCEQ, responding to comment by the United States Nuclear Regulatory Commission (NRC), adopted 336.1115(e)(1-4) as follows:

(e) Outdoor areas are considered suitable for release for unrestricted use if the following limits are not exceeded.

(1) The concentration of radium-226 or radium-228 (in the case of thorium by-product material) in soil, averaged over any 100 square meters (m2), may not exceed the background level by more than:

(A) 5 picocuries per gram (pCi/g) (0.185 Becquerel per gram (Bq/g)), averaged over the first 15 cm of soil below the surface; and

(B) 15 pCi/g (0.555 Bq/g), averaged over 15 cm thick layers of soil more than 15 cm below the surface.

(2) The contamination of vegetation may not exceed 5 pCi/g (0.185 Bq/g), based on dry weight, for radium-226 or radium-228.

(3) The concentration of natural uranium in soil, with no daughters present, averaged over any 100 m2, may not exceed the background level by more than:

(A) 30 pCi/g (1.11 Bq/g), averaged over the top 15 cm of soil below the surface; and

(B) 150 pCi/g (5.55 Bq/g), average concentration at depths greater than 15 centimeters below the surface; and

(4) no individual member of the public will receive an effective dose equivalent in excess of 100 mrem (1 mSv) per year as calculated by the methodology provided in NUREG-1620, Appendix H - "Guidance to the U.S. Nuclear Regulatory Commission Staff on the Radium Dose Approach." (emphasis added)

UEC believes that NRC's Radium Dose Approach (sometimes referred to as "Benchmark Dose Approach") is used as an alternative to set remedial standards for radionuclides (other than radium) in the soil. A strict reading of 30 TAC Section 336.1115(e) would currently require an applicant to meet the numeric criteria listed and the Radium Dose Approach before a site can be decommissioned.

To require both standards to be satisfied would render the Radium Dose Approach moot. The Radium Dose Approach is more akin to a Risk Based approach to clean up. That is, the Radium Dose Approach calculates cleanup levels based on actual dosage to a human.

More important, the uranium closure criteria in clause 336.1115(e)(3) is unnecessary because use of the dose / risk based Radium Benchmark Dose Approach per 30 TAC 336.1115(e)(4):

- Includes calculations of site specific uranium concentrations;
- Requires compliance to the unity rule; and
- Ensures exposures of future residents will be less than the TCEQ and NRC fundamental public exposure criteria of 100 mrem/yr

As stated, the TCEQ adopted subsection 336.1115(e)(4) based on comment from NRC. UEC believes that this standard was intended to be an alternative to the numeric standards listed in 336.1115(e)(1-3). It is of note that The Radium Benchmark Dose approach {as required by 10 CFR 40, Appendix A, Criteria 6(6)} has been used for this purpose as part of the licensing process for the recent uranium recovery licenses issued by the NRC.

The Radium Benchmark Approach (NUREG 1620, Appendix H) includes use of the imbedded radium criteria (10 CFR 40, Appendix A, Criteria 6(6)} and 336.1115(e)(1)}. It is fully protective of human health and the environment without the need for quantitative uranium criteria that is not specific to site conditions and is not dose / risk based.

TEXT OF PROPOSED RULE (30 TAC Section 20.15(a)(3)(B)

UEC's suggestion is quite simple—omit subsection in 336.1115(e)(3). Thus, the amended rule would read as follows:

(e) Outdoor areas are considered suitable for release for unrestricted use if the following limits are not exceeded.

(1) The concentration of radium-226 or radium-228 (in the case of thorium by-product material) in soil, averaged over any 100 square meters (m2), may not exceed the background level by more than:

(A) 5 picocuries per gram (pCi/g) (0.185 Becquerel per gram (Bq/g)), averaged over the first 15 cm of soil below the surface; and

(B) 15 pCi/g (0.555 Bq/g), averaged over 15 cm thick layers of soil more than 15 cm below the surface.

(2) The contamination of vegetation may not exceed 5 pCi/g (0.185 Bq/g), based on dry weight, for radium-226 or radium-228; and

~~(3) The concentration of natural uranium in soil, with no daughters present, averaged over any 100 m2, may not exceed the background level by more than:~~

~~(A) 30 pCi/g (1.11 Bq/g), averaged over the top 15 cm of soil below the surface; and~~

~~(B) 150 pCi/g (5.55 Bq/g), average concentration at depths greater than 15 centimeters below the surface; and~~

~~(4)~~ (3) no individual member of the public will receive an effective dose equivalent in excess of 100 mrem (1 mSv) per year as calculated by the methodology provided in NUREG-1620, Appendix H - "Guidance to the U.S. Nuclear Regulatory Commission Staff on the Radium Dose Approach." (emphasis added)

STATUTORY AUTHORITY (30 TAC Section 20.15(a)(3)(C)

401.011, 401.051 and/or 401.104 *Health and Safety Code* and 5.103, *Water Code,* authorize this rulemaking.

INJURY OR INEQUITY FROM FAILURE TO ADOPT PROPOSALS (30 TAC Section 20.15(a)(3)(D)

Failure to adopt this proposal could result in inequity or injury to a license holder seeking to decommission a site. The injury or inequity is largely in the potential cost of decommissioning. As described above, the current rule would require, or at least could be interpreted to require, that a licensee meet both the Radium Benchmark Dose and specific numeric criteria for natural uranium. Having the dual and redundant requirements are expensive and unnecessary. As shown, the Benchmark Radium Dose approach is generally followed by states and is required by the NRC.

UEC appreciates the TCEQ's attention and consideration of this request. We are happy to meet with you or the proper staff at your convenience.

Very truly yours,

Andrew N. Barrett

Texas Commission on Environmental Quality

DECISION OF THE COMMISSION
REGARDING THE PETITION FOR RULEMAKING
FILED BY BARRETT & ASSOCIATES, PLLC on behalf of URANIUM ENERGY CORP

Docket No. 2013-0402-RUL

On April 10, 2013, the Texas Commission on Environmental Quality (Commission) considered the petition for rulemaking filed by Barrett & Associates, PLLC on behalf of Uranium Energy Corp (petitioner). The petition, filed on February 12, 2013, requests that the agency initiate rulemaking to amend § 336.1115(e), related to decommissioning standards for release of outdoor areas for unrestricted use at uranium mining sites. Specifically, the petitioner requests the removal of existing language in § 336.1115(e)(3) to eliminate the uranium soil concentration standard.

IT IS THE DECISION OF THE COMMISSION pursuant to Administrative Procedure Act, Texas Government Code, § 2001.021 and Texas Water Code, § 5.102 to **instruct the Executive Director to examine the issues in the petition and to initiate rulemaking.**

This Decision constitutes the decision of the Commission required by the Texas Government Code, § 2001.021(c).

Issued date: APR 22 2013

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Bryan W. Shaw

Bryan W. Shaw, Ph.D., Chairman